

Claims

1. Secure operation mechanism (10, 10') for electrical shutdown device (1, 1') intended to be housed in a cabinet (4) closed by a door (5), in which this shutdown device (1, 1') can be moved into a disengaged position (0 position) and an engaged position (1 position) by shifting a control shaft (6, 6') attached to a "principal" handle (7) mounted on said door (5) so as to be accessible from the outside of said cabinet (4) when said door (5) is closed. characterized in that said secure operation mechanism (10, 10') has at least one "secondary" handle (11, 11') intended to be attached to said control shaft (6, 6') so as to be accessible from inside said cabinet (4) in order to switch said shutdown device (1, 1') between its 0 and 1 positions when said door (5) is open, and a locking mechanism intended to be attached to said control shaft (6, 6') that is positioned to be mobile between at least one locked position, in which it prevents said shutdown device (1, 1') from being switched, and an unlocked position, in which switching is enabled.

2. Secure operation mechanism of claim 1, characterized in that said locking method is positioned in order to move from said locked position to said unlocked position by performing a manual action on said secondary handle (11, 11') to move said control shaft (6, 6') along direction (P) over a predefined distance at least equal to (C) and to return from the unlocked position to the locked position automatically through the action of a return mechanism (13, 13') acting on said control shaft (6, 6').

3. Secure operation mechanism of claim 2, characterized in that said locking method has at least one fixed locking mechanism intended to be mounted on said shutdown device (1, 1') and a mobile locking mechanism intended to be mounted on said control shaft (6, 6') to extend in the direction of said fixed locking mechanism and operate in conjunction with the latter, at least in the locked position.

4. Secure operation mechanism of claim 3, characterized in that said fixed locking mechanism includes a plate (17, 17') with at least one opening (18, 18') defining at least one lock zone (18a,

18'a) and at least one unlock zone (18b, 18'b) and in that said mobile locking mechanism has at least one stub (15, 15') that can be lodged in said lock zone (18a, 18'a) to prevent said control shaft (6, 6') from being switched, and that can rotate in said unlock zone (18b, 18'b) to enable this switching.

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5. Secure operation mechanism of claim 4, characterized in that the lock zone (18a, 18'a) extends roughly parallel to the control shaft (6, 6') over a length that determines said distance (C) and the unlock zone (18b, 18'b) extends roughly perpendicular to this control shaft (6, 6') over a length corresponding at least to the angular displacement followed by said control shaft (6, 6') to switch said shutdown device (1, 1').

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6. Secure operation mechanism of claim 4, characterized in that said mobile locking mechanism has a plate (14, 14') that is lengthened by said stub (15, 15').

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7. Secure operation mechanism of claim 6, characterized in that said plate (14, 14') has at least one opening (14a, 14'a) positioned to receive at least one padlock, making it possible to lock said shutdown device (1, 1') in the 0 position.

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8. Secure operation mechanism of claim 2, characterized in that said return mechanism (13) is intended to be mounted along the axis of said control shaft (6).

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9. Electrical shutdown device (1, 1') intended to be housed in a cabinet (4) closed by a door (5), and this shutdown device (1, 1') can be switched between a disengaged position (0 position) and an engaged position (1 position) by moving a control shaft (6, 6') attached to a "principal" handle (7) mounted on said door (5) so as to be accessible from outside said cabinet (4) when said door (5) is closed, **characterized** in that it includes a secure operation mechanism (10, 10') equipped with at least one secondary handle (11, 11') attached to said control shaft (6, 6') so as to be accessible from inside said cabinet (4) in order to switch said shutdown device (1, 1') between its 0 and 1 positions when said door (5) is open, and with a locking method attached to said control shaft (6, 6') that is positioned to be mobile between at

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least one locked position, in which said shutdown device (1, 1') is prevented from switching, and an unlocked position, in which switching is enabled.

5 10. Shutdown device of claim 9, characterized in that said locking method is positioned to move from said locked position to an unlocked position by performing a manual action on said secondary handle (11, 11') in order to move said control shaft (6, 6') along direction (P) over a predefined distance at least equal to (C) and to return from the unlocked position to the locked position automatically, through the action of a return mechanism (13, 13') acting on said control shaft (6, 6').

10 11. Shutdown device of claim 10, characterized in that said locking method includes at least one fixed locking mechanism mounted on said shutdown device (1, 1') and at least one mobile locking mechanism, mounted on said control shaft (6, 6') to extend in the direction of said fixed locking mechanism and to operate in conjunction with the latter, at least in the locked position.

15 12. Shutdown device of claim 11, characterized in that said fixed locking mechanism has a plate (17, 17') equipped with at least one opening (18, 18') defining at least one lock zone (18a, 18'a) and at least one unlock zone (18b, 18'b) and in that said mobile locking mechanism has at least one stub (15, 15') that can be lodged in said lock zone (18a, 18'a) to prevent said control
20 shaft (6, 6') from switching, and that can rotate in said unlock zone (18b, 18'b) to enable this switching.

13. Shutdown device of claim 12, characterized in that the lock zone (18a, 18'a) extends roughly parallel to the control shaft (6, 6') over a length that determines said distance (C), and
25 the unlock zone (18b, 18'b) extends roughly perpendicular to this control shaft (6, 6') over a length corresponding at least to the angular displacement followed by said control shaft (6, 6') for switching said shutdown device (1, 1').

14. Shutdown device of claim 12, characterized in that said mobile locking mechanism has a
30 plate (14, 14') that is lengthened by said stub (15, 15').

15. Shutdown device of claim 14, characterized in that said plate (14, 14') has at least one opening (14a, 14'a) positioned to receive at least one padlock, making it possible to lock said shutdown device (1, 1') in its 0 position.

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16. Shutdown device of claim 10, characterized in that said return mechanism (13) is mounted along the axis of said control shaft (6).